ABSTRACT

A hub based computer system having a central hub that communicates with a plurality of satellite devices over respective link buses. Each link bus is substantially the same and adheres to a predefined link bus protocol. The satellite

5   devices are also connected to industry standard buses/devices. The central hub also communicates with a processor and system memory over additional buses. Each link bus includes a status line that allows each device connected to the same link bus to request control of the bus. The link bus protocol establishes a window in which the status signal may convey arbitration request information in a time-

10   multiplexed manner. The protocol further includes a method of determining whether control of the bus can be transferred to a different device. Each device takes part in the decision process and thus, the arbitration method of the invention is decentralized.